CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SANTA ANA REGION

April 30, 2004

ITEM: 17

SUBJECT: Southern California Coastal Water Research Project Draft Report on Bioaccumulation of Contaminants in Recreational and Forage Fishes of Newport Bay

In 1999, Board staff began the development of the toxics Total Maximum Daily Loads (TMDLs) for the San Diego Creek/ Newport Bay watershed. The data that was evaluated included fish and mussel tissue data collected through the State Mussel Watch (SMW) and Toxic Substances Monitoring (TSM) Programs from the watershed over a 20-year period. These and other data indicated that, although fish tissue concentrations for organochlorine compounds were declining overall, they still exceeded the human health screening values (SVs) established by the Office of Environmental Health Hazard Assessment (OEHHA) and US Environmental Protection Agency (EPA).

The available data collected from Newport Bay and San Diego Creek were not statistically sufficient to fully evaluate impairments to aquatic life in the watershed or the potential risk to persons consuming locally caught fish. Staff designed a more detailed, statistically robust study to investigate the bioaccumulative contaminant concentrations in fishes of Newport Bay to determine potential impacts to human health and wildlife from consumption of these fish. Doctor James Allen with the Southern California Coastal Water Research Project (SCCWRP) conducted the three-year study. The study was funded using a portion of the American Trader Oil Spill Settlement fine monies.

Fifty-eight species of fish were collected for the SCCWRP study. The study found that many fishes in Newport Bay consumed by humans or wildlife have tissue contaminant levels that may pose health risks. DDT was the most widespread contaminant of concern in fish tissue, followed by PCBs. The results of this study will be used to review the current waste load and load allocations for the organochlorine TMDL to determine if the calculated loading capacities can still be considered protective of beneficial uses in Newport Bay.

On March 18, 2004, Board staff filed a Proposition 65 Notification report with County of Orange Health Care Agency (OCHCA). The purpose of Proposition 65 is to protect public health and inform the public about potential exposures to chemicals. Subsequently, on March 31, 2004, SCCWRP presented the study results at a meeting of the Newport Bay Watershed Management Committee. Board staff has also solicited peer review of the SCCWRP draft report from OEHHA, OCHCA, US Geological Survey, US Fish and Wildlife Service, and US Environmental Protection Agency staff. Peer review comments have been

received from most agencies and the final fish bioaccumulation report should be completed by no later than May 15, 2004.

The OEHHA and EPA human health SVs cited in the SCCWRP report are not intended to be used by other agencies as regulatory standards to determine an actionable human health risk. Rather, SVs are used to identify chemical contaminants in fish tissue that may be of potential health concern to persons who frequently consume recreational fish. Exceedances of SVs help determine if more intensive site-specific monitoring should be conducted to build an adequate data set for evaluation of human health risk. OEHHA will combine validated and final data from the SCCWRP study and other studies (e.g., the Coastal Fish Contamination Program and the joint EPA Superfund and Montrose Settlements Restoration Programs) to build a comprehensive data set that can be used to revise and expand the current fish consumption advisories in Los Angeles and Orange Counties. OEHHA's evaluation of these data will begin later this year when all data are validated and finalized.